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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,299	01/10/2001	David Clarke Pollock	HEM 99/607 (A-2911)	9699
24131	7590	10/20/2005	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			PRONE, JASON D	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/758,299

Applicant(s)

POLLOCK ET AL.

Examiner

Jason Prone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5,7-11 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 7-11, and 22-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, 7-11, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fr. 470,543 in view of Spengler (4,014,234) further in view of Shore et al. (5,526,726).

#### Claims 1, 5, 7-9, and 22-24:

Fr. 470,543 discloses the invention including a pair of cylinders disposed opposite one another with a gap in-between (C and D), that the pair of cylinders includes a first cutting cylinder (C) having a periphery with a cutting knife disposed helically about the periphery (E), and a second cylinder (D), and one drive (it is inherent the cylinders C and D must have a drive to rotate them, see semi-circular arrows from Fig. 1) rotating the first cutting cylinder at a speed proportional to the speed of the work piece (speed of the cylinder is proportional to the speed of the work piece to produce the specific cut shown in Fig. 3) for cutting and providing a cut from the work piece with a smooth straight edge (a).

However, Fr. 470,543 fails to disclose a sub-frame having a pivot point, the sub-frame supports the cylinders, the sub-frame controlling a position of the cylinders in regards to the work piece, a further drive connected to the sub-frame for pivoting the

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sub-frame about the pivot point, a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting cylinder, a second drive rotates and mounts to the second cylinder, the first and second drives are motors, and that the first and second drives are gears, a sensor connected to the control unit and disposed in the travel path of the work piece, providing control signals to the control unit for controlling operation of the cylinders and monitoring the cutting operation, the sensors detect an unacceptable cut, and that the control unit is a microprocessor.

In regards to claims 1, 5, 7, and 8, Spengler teaches a sub-frame (32) having a pivot point (29), the sub-frame supports the cylinders and first and second drives (Fig. 3), the sub-frame controlling a position of the cylinders in regards to the work piece (29), a further drive connected to the sub-frame for pivoting the sub-frame about the pivot point (45), a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting cylinder (Column 5 lines 40-52), a second drive rotates and mounts to the second cylinder (Abstract), the first and second drives are motors (6), and the first and second drives are gears (7). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have provided Fr. 470,543 with a pivoting sub-frame and drives, as taught by Spengler, to allow for different angles to be cut into the work piece and to more efficiently run the cutting drums.

In regards to claims 1, 9, and 22-24, Shore et al. teaches a sensor, connected to the control unit and disposed in the travel path of the work piece, providing control

signals to the control unit for controlling operation of the cylinders and monitoring the cutting operation, the sensors detect an unacceptable cut, the sensor is a position sensor, and the control unit is a microprocessor (Column 1 lines 15-26). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have replaced the user input control unit of Fr. 470,543 in view of Spengler with the sensors and control unit as taught by Shore et al. in order to provide Fr. 470,543 in view of Spengler with a more accurate and faster control of the cutting conditions.

Claims 10 and 11:

Fr. 470,543 discloses the invention including a frame (Inherent), one drive (it is inherent the cylinders C and D must have a drive to rotate them, see semi-circular arrows from Fig. 1), a pair of cylinders disposed opposite one another with a gap in-between (C and D), the pair of cylinders includes a first cutting cylinder (C) having a periphery with a cutting knife disposed helically about the periphery (E), and a second cylinder (D), and the first cutting cylinder is driven by the one drive at a speed proportional to the speed of the work piece (speed of the cylinder is proportional to the speed of the work piece to produce the specific cut shown in Fig. 3) for cutting and providing a cut from the work piece with a smooth straight edge (a).

However, Fr. 470,543 fails to disclose the one drive is housed in the sub-frame, a sub-frame pivotally mounted on the frame, the sub-frame controlling a position of the cylinder in regards to the work piece, a further drive connected to the sub-frame for pivoting the sub-frame about the pivot point, a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting

cylinder, a second drive rotates and mounts to the second cylinder, a component of travel of a point of contact between the cylinders in a direction of travel of the work piece matches a speed of the work piece for cutting in a straight line, a sensor connected to the control unit and disposed in the travel path of the work piece, and providing control signals to the control unit for controlling operation of the cylinders and monitoring the cutting operation.

Spengler teaches the one drive is housed in the sub-frame (Fig. 1), a sub-frame pivotally mounted on the frame (29), the sub-frame controlling a position of the cylinder in regards to the work piece (32), a further drive connected to the sub-frame for pivoting the sub-frame about the pivot point (45), a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting cylinder (Column 5 lines 40-52), a second drive rotates and mounts to the second cylinder (Abstract), and that a component of travel of a point of contact between the cylinders in a direction of travel of the work piece matches a speed of the work piece for cutting in a straight line (Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have provided Fr. 470,543 with a pivoting sub-frame and drives, as taught by Spengler, to allow for different angles to be cut into the work piece and to more efficiently run the cutting drums.

Shore et al. teaches a sensor, connected to the control unit and disposed in the travel path of the work piece, and providing control signals to the control unit for controlling operation of the cylinders and monitoring the cutting operation (Column 1 lines 15-26). Therefore, it would have been obvious to one of ordinary skill in the art, at

the time of the invention to have replaced the user input control unit of Fr. 470,543 in view of Spengler with the sensors and control unit as taught by Shore et al. in order to provide Fr. 470,543 in view of Spengler with a more accurate and faster control of the cutting conditions.

### ***Response to Arguments***

2. Applicant's arguments filed 27 July 2005 have been fully considered but they are not persuasive. Bourdin does have a drive to move the first cutting cylinder (semi-circular arrows in Fig. 1). In order for the cuts, shown in Figure 3, to be in a straight line there has to be cooperation between the speeds of the cylinders and the work piece. In Spengler, it is taught that the sheet material is moved at a constant speed, while the speed of the drive mechanism is changed to accommodate the size of the finished blank. However, even though the speed of the drive mechanism is changed to accommodate the size of the finished blank, in order for the specific cut to be created, the speed of the work piece and the cutting cylinder must be proportional or an incorrect cut will be made.

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is (571) 272-4513. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 18, 2005

A handwritten signature in black ink, appearing to read "Jason Prone", written in a cursive style.

Patent Examiner  
Jason Prone  
Art Unit 3724  
T.C. 3700